

Appl. No. 10/034,680
Docket No. 14X200155/GEM-0194
Reply to Office communication of 11/12/2004
Amendment dated 02/11/2005

AMENDMENTS TO THE DRAWINGS

The attached sheet 1/3 of drawings includes changes to Fig. 3 and 4, to include reference numeral 4 as depicted in Figures 1 and 2. No new matter has been added. This sheet 1/3, that includes Figs. 3 and 4, replaces original sheet 1/3 including Figs. 3 and 4.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

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REMARKS / ARGUMENTS

Enclosed with this amendment is an Amendment Transmittal instructing the payment of an official fee for additional Claim 21, and a Change of Address.

Status of Claims

Claims 1-20 are rejected by the Examiner. Applicant has amended Claim 19, has added new Claim 21, and herein provides clarifying remarks, for consideration by the Examiner, to traverse the rejections, leaving Claims 1-21 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §102(b) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Objections to the Drawings

The drawings filed on December 19, 2001 have been objected to by the Examiner because of a missing reference numeral. Applicant has corrected the drawings as suggested by the Examiner and submitted a Replacement Sheet for consideration thereof. Accordingly, Applicant submits that the drawings are now in compliance with 37 CFR 1.84(p)(5) and therefore respectfully requests reconsideration and withdrawal of this objection.

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Objections to the Specification

The Examiner objected to the disclosure because of the following informalities:

Page 2, paragraph 9: "displayed embodiment" ought to be amended to "displayed according to an embodiment".

Page 3, paragraph 14: "In of Figure 1" ought to be amended to "In Figure 1".

Page 4, paragraph 16: "jAs" ought to be amended to "As".

Page 4, paragraph 18: "arrows 12" ought to be amended to "arrows 16".

Page 6, paragraph 21: "At step 13" ought to be amended to "At step 30".

Page 7, paragraph 22: "At block 32" ought to be amended to "block 42".

Applicant has amended the specification as suggested by the Examiner to replace the objected language with language suggested by the Examiner.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the objection.

Rejections Under 35 U.S.C. §102(b)

Claims 1-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Spivey et al. (U.S. Patent No. 5,712,890, hereinafter Spivey).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, *in a single prior art reference.*" *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the *** claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements "arranged as in the claim." *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference.

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Titanium Metals Corp. v. Banner, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

At the outset, Applicant notes that Examiner's paragraph 5 makes reference to Liu et al. and not Spivey et al. in rejecting Claims 1 and 3, but relies upon Spivey for support of those rejections. Since the Examiner states on page 9 of paper no. 11012004 that Liu et al. is prior art made of record and not relied upon, Applicant views the reference to Liu et al. in Examiner's paragraph 5 as a typographical error and that reference was intended to be to Spivey et al. If this is contrary to the intent of the Examiner, Applicant respectfully requests clarification thereof.

Regarding Claims 1 and 2

The Examiner alleges that [Spivey] discloses a method for displaying digital images of a body part or parts that includes all of the elements of the claimed invention, including "defining a region of interest *on each image embracing the body part.*" (Emphasis added). Paper 11012004, page 4.

Applicant respectfully disagrees.

At the outset, Applicant notes that the Examiner appears to be equating Spivey reference numeral 1, the breast (col. 3, line 43), with both the body part 6, 8 and the region of interest 10, 12 of the instant invention. Paper 11012004, page 4. If Applicant agrees that Spivey reference numeral 1 is both the body part and the region of interest, then it necessarily follows that the Spivey body part and region of interest (Spivey reference numeral 1) is distributed over multiple images (Pane 1 through Pane 4 of Figure 3a). However, this is contrary to the claimed invention, which defines a region of interest 8, 10 *on each image 2, 4 embracing the body part 6, 8.*

Applicant submits that the term "embracing" has the ordinary meaning of "surrounding" or "enclosing". The American Heritage® Dictionary of the English Language, Fourth Edition, Copyright © 2000 by Houghton Mifflin Company.

Accordingly, and in comparing the instant invention with Spivey, Applicant submits, in respectful disagreement with the Examiner, that Spivey discloses a region of interest (Pane 1 through Pane 4) that *embraces only a portion of the body part 1*, and

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does not disclose a region of interest 10, 12 on each image 2, 4 *embracing the body part* 6, 8, where each region of interest 10, 12 embraces (surrounds or encloses) *the body part* 6, 8. A substantial difference between Spivey and the instant invention is that the Spivey region of interest *embraces only a portion of* the body part of interest, while the region of interest of the instant invention *embraces the entire* body part of interest.

According to the plain and ordinary meaning of the term “embracing”, Applicant submits that Spivey discloses a region of interest that *“surrounds or encloses” only a portion of the body part of interest*, and does not disclose a region of interest that *“surrounds or encloses” the body part of interest*, as claimed in the instant invention.

Absent anticipatory disclosure in Spivey of *each and every element* of the claimed invention *arranged as in the claim*, Spivey simply cannot be anticipatory.

Dependent claims inherit all of the limitations of the parent claim.

Regarding Claims 3 and 4

The Examiner alleges that [Spivey] discloses the claimed invention including “...wherein the region of interest (Fig. 3a, num. 1) *is a rectangular region* (using Figure 3a, Pane 1 through Pane 4 is a rectangular region that contains the region of interest Fig. 3a, num.1) of the image (Fig. 3a contains images Pane 1 through Pane 4 where each image contains the region of interest 1) *of a minimum* (Fig. 3a and 3b num.1 is a minimum surface area selected using material 2[6] as described from col. 4, line 59 to col. 5, line 13) *surface area* (Fig. 3a and 3b, num. 1) to cover the body part (Fig. 3a, Nominal Chest Wall and Fig. 3a, num.1).” Paper 11012004, page 4 (Emphasis added).

Applicant respectfully disagrees.

At the outset, Applicant finds the Examiner to be equating Spivey reference numeral 1 to the “region of interest”, a “minimum surface area”, and the “body part” of the claimed invention, and to be alleging that a minimum surface area is selected by using an x-ray attenuating material 26. Paper 11012004, page 4.

Contrary to Spivey, Applicant’s invention is directed to *a region of interest 10, 12 that is a rectangular region* of the image of a minimum surface area to cover the body part 6, 8, and not to a region of interest that *has the shape of the body part*.

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If Applicant accepts the Examiner's position that Spivey reference numeral 1 is the region of interest, the minimum surface area, and the body part, then it necessarily follows that *Spivey reference numeral 1 cannot be a rectangular region* since it has the shape of the body part. (Figure 3a). Accordingly, Spivey cannot disclose and therefore cannot anticipate the claimed invention, which includes a method wherein *the region of interest is a rectangular region* of the image of a minimum surface area to cover the body part.

Furthermore, Applicant finds no disclosure in Spivey, as referenced, of the region of interest being a rectangular region of the image of *a minimum surface area* to cover the body part. While the Examiner cites Spivey at col. 4, line 59 to col. 5, line 13, in an effort to support this disclosure, Applicant finds Spivey as cited to disclose *an x-ray attenuating material 26 to alleviate the problems associated with* the excessive conversion of x-rays to visible light in the non-breast region of the phosphor 8, and the overexposure of the pixels on the CCD 13 which are in the non-breast region. In respectful disagreement with the Examiner, Applicant finds no disclosure in Spivey of the region of interest being a rectangular region of the image of *a minimum surface area* to cover the body part, and the Examiner has not stated with specificity where such disclosure may be found. Accordingly, Applicant submits that the Examiner has not met the burden of establishing a prima facie case of anticipation.

Dependent claims inherit all of the limitations of the parent claim.

Regarding Claims 5-18

Dependent claims inherit all of the limitations of the respective parent claim and all intervening claims, and where a claim is found to be allowable and not anticipated, then any claiming depending therefrom is also allowable.

Regarding Claims 19-20

Applicant has amended Claim 19 to now recite, inter alia, "...wherein the image processing unit comprises: a region of interest defining block for defining a region of interest *on each image embracing the body part...*".

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Claim 19 now recites an apparatus that is configured to practice the method of Claim 1, and for at least the reason set forth above regarding the allowability of Claim 1, Applicant respectfully submits that Spivey does not disclose each and every element of the claimed invention arranged as claimed, and specifically does not disclose the image processing unit comprising a region of interest defining block for defining a region of interest *on each image embracing the body part*, as claimed.

Dependent claims inherit all of the limitations of the parent claim.

Regarding New Claim 21

Applicant has added new Claim 21 that is directed to an invention similar to that of Claim 1, but in alternative language. For at least the reasons set forth above regarding Claim 1, Applicant submits that Claim 21 is directed to allowable subject matter, and respectfully requests entry and notice of allowance thereof.

In view of the amendment and foregoing remarks and amendments, Applicant submits that Spivey does not disclose each and every element of the claimed invention arranged as claimed and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejection under 35 U.S.C. §102(b) has been traversed, and requests that the Examiner reconsider and withdraw of this rejection.

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The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 09-0470.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above identified Deposit Account.

Respectfully submitted,

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